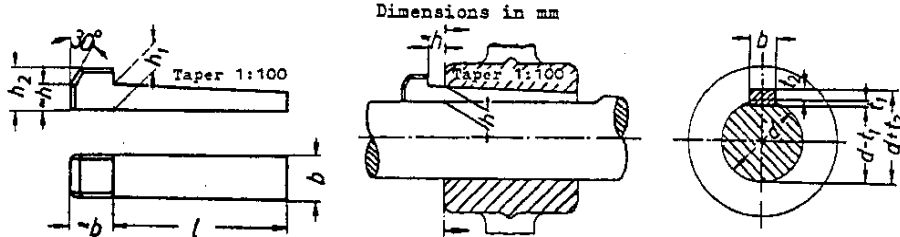


Taper Key Torque Transmission
Gib-head Parallel Keys
Dimensions and Application

DIN
6884

Spannungsverbindungen mit Anzug; Nasenflachkeile, Abmessungen und Anwendung



Dimensions in mm

Breaking of corners
Chamfering RADIUSING at manufacturer's choice
Radius at bottom of keyway

Designation of a gib-head parallel key of width $b = 8$ mm, height $h = 5$ mm and length $l = 20$ mm
Gib-head parallel key 8 x 5 x 20 DIN 6884



Width of key	b h ⁹	8	10	12	14	16	18	20	22	25	28	32	36	40	45	50
Height of key	h Nom. dim.	5	6	6	6	7	7	8	9	9	10	11	12	14	16	18
For shaft diameter d ¹⁾	above	22	30	38	44	50	58	65	75	85	95	110	130	150	170	200
	up to	30	38	44	50	58	65	75	85	95	110	130	150	170	200	230
Height of key	h_1	5,2	6,2	6,2	6,2	7,2	7,2	8,2	9,2	9,2	10,2	11,3	12,4	14,4	16,4	18,4
Height of gib-head	h_2	9	10	10	11	13	14	16	18	18	20	22	25	28	32	36
	perm. var.															
Depth	t_1 ²⁾	1,3	1,8	1,8	1,4	1,9	1,9	1,9	1,8	1,9	2,4	2,3	2,8	4	4,7	5,2
	perm. var.															
Width of keyway in hub	b D 10	8	10	12	14	16	18	20	22	25	28	32	36	40	45	50
Depth of keyway in hub	t_2 ²⁾	3,2	3,7	3,7	4	4,5	4,5	5,5	6,5	6,4	6,9	7,9	8,4	9,1	10,4	11,7
	perm. var.															
Chamfering or radiusing	r_1	0,4			0,5			0,6			0,8		1		1,2	
	perm. var.															
Radiusing of bottom of keyway	r_2	0,4			0,5			0,6			0,8		1		1,2	
	perm. var.															
Length l ³⁾	perm. var.															
			Weight (7,85 kg/dm ³) kg/1000 pieces ≈													
20		10,6														
22		11,2														
25		12,2	19,0													
28		13,1	20,4													
32		14,3	22,1	29,1												
36		15,5	24,0	31,0												
40		16,8	26,0	33,5	42,5											
45		18,2	27,7	36,3	45,7	63,3										
50		19,7	30,5	38,9	48,7	67,8	83,0									
56		21,5	33,0	42,0	52,3	73,0	88,0	118								
63		23,5	36,2	46,5	57,5	79,0	95,0	126	161							
70		25,5	39,1	49,3	61,0	85,0	101	135	172	205						
80		28,4	43,5	54,4	67,6	93,0	111	146	187	221	288					
90		31,0	47,7	59,4	73,0	101	120	158	201	238	308	413				
100		30,9	65,0	78,0	107	128	170	215	263	328	439	576				
110			56,0	70,3	84,0	117	138	180	228	269	349	475	608	813		
125				76,0	92,0	128	149	187	249	293	376	500	652	874	1180	
140				89,0	100	139	162	203	270	317	408	532	698	935	1260	1636
160					108	154	178	222	297	346	446	588	761	1015	1360	1773
180						167	192	240	322	375	483	635	822	1095	1470	1910
200							209	259	347	403	522	682	883	1174	1570	2040
220								277	371	432	558	730	943	1251	1670	2160
250									407	472	608	802	1026	1365	1820	2360
280										512	657	862	1102	1480	1960	2540
315											710	936	1203	1600	2130	2750
355												1010	1308	1740	2340	3000
400													1411	1890	2490	3240

No figures for permissible variations of tapers on keys and in hub keyways have so far been laid down. If, in special cases, certain prescribed permissible variations must be observed, these must be agreed with the manufacturer when ordering.
Dimension h is the maximum height of the key (not including gib-head), dimensions $(d + t_2)$ and t_2 relate to the maximum depth of the keyway in the hub.
Material: St 60 (steel having a tensile strength of at least 60 kg/mm² in the finished condition) alternative materials to be specified when ordering

- Where corresponding dimensions are involved, particularly for shaft extensions, it is vital that the appropriate key cross-section be assigned to the shaft diameters concerned.
- In workshop drawings the dimensions t_1 and $(d - t_1)$, also t_2 and $(d + t_2)$ may appear side by side; however, in many cases the dimensions $(d - t_1)$ and $(d + t_2)$ will suffice. In this connection it may be necessary to allow for permissible variations and machining allowances on the shaft and hub bore.
- Where intermediate lengths are unavoidable these should be selected according to DIN 3. In all doubtful cases the permissible variation of the next greater length l should be used.